

Appln. Ser. No. 10/807,889
Amdt. Dated Sept. 30, 2004
Reply to Office Action of June 30, 2004

PATENT
Atty. Dkt. No. 81864.0037
Customer No. 26021

REMARKS:

Applicants appreciate the thorough examination of the application that is reflected in the Office Action mailed June 30, 2004. The Office Action has been carefully reviewed and the foregoing amendments and the following remarks are made in response thereto.

The Office Action points out that the oath/declaration is defective. Applicants respectively submit a new oath/declaration in compliance with 37 C.F.R. 1.67(a) that properly identifies this application by application number and filing date.

Claims 18, 19, 22, 23 and 27 stand rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 6,468,365 to Uchida et al. (hereinafter "Uchida") and claim 21 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Uchida. Applicants gratefully acknowledge the Office Action's indication that claims 1-17, 24-26, 28 and 29 are allowed and that claim 20 would be allowable if rewritten in independent form to include all of the features of the base claim and any intervening claims. Regarding claim 20, in view of the allowability of independent claim 18 as described below, Applicants respectfully decline to amend dependent claim 20 to place it into independent form at this time.

By this amendment, claims 18, 20 and 27 have been amended to further define the subject matter Applicants regard as the invention. New claims 30-33 have been added. Claims 1-17, 19, 21-26, 28 and 29 remain unchanged. Thus, claims 1-33 are presently pending in this application for consideration. It is not the Applicants' intent to surrender any equivalents because of the amendments or arguments made herein. Reexamination and reconsideration of the application are respectfully requested.

Applicants respectfully submit that the rejected and new claims are patentably distinguishable over the cited reference as required by 35 U.S.C. 102

and 103. Applicants further submit that the cited reference fails to disclose an R-T-B system rare earth permanent magnet having the combination of ***0.03% to 0.25% by weight of Zr and 2,000 ppm or less of oxygen*** as recited in amended independent claims 18 and 27 and new independent claim 33. Moreover, Applicants respectfully submit that the cited reference also fails to disclose ***Nb dispersed in the main phase and the grain boundary phase of the sintered body*** as recited in new independent claim 32. Thus, independent claims 18, 27, 32 and 33 and all claims dependent directly or indirectly therefrom are allowable. These distinctions will be described in greater detail below.

THE CLAIMS DISTINGUISH OVER THE CITED REFERENCE:

The present invention is directed to an R-T-B system rare earth permanent magnet. According to one embodiment of the present invention as defined by independent claims 18 and 27, the R-T-B system rare earth permanent magnet includes a sintered body with a composition of 25% to 35% by weight of R (wherein R represents one or more rare earth elements). The sintered body also includes 0.5% to 4.5% by weight of B and 0.02% to 0.5% by weight of Al and/or Cu. The amount of oxygen is 2,000 ppm or less in the sintered body, and a mean grain size is between 3.5 and 5.0 μm in the sintered body. Independent claims 18 and 27 have been amended to include the sintered body having ***0.03% to 0.25% by weight of Zr***. New independent claim 33 also includes each of these features.

According to another embodiment of the present invention as defined by new independent claim 32, the R-T-B system rare earth permanent magnet includes the sintered body with a composition of 25% to 35% by weight of R, 0.5% to 4.5% by weight of B and 0.02% to 0.5% by weight of Al and/or Cu. The amount of oxygen is 2,000 ppm or less and the mean grain size is between 3.5 and 5.0 μm in the sintered

body. New independent claim 32 further recites *Nb is dispersed in the main phase and the grain boundary phase of the sintered body.*

Applicants respectfully submit that the Uchida reference fails to teach or suggest the combination of *0.03% to 0.25% by weight of Zr and 2,000 ppm or less of oxygen* as recited in independent claims 18 and 27. Moreover, paragraph 8 of the outstanding Office Action confirms this fact. Thus, amended claims 18 and 27 as well as all claims dependent therefrom, namely claims 19-23, 30 and 31 are allowable.

With respect to new independent claim 33, this claim is allowable for at least the same reasons set forth with respect to amended claims 18 and 27 and also for containing each of the features recited in allowed claim 12. Thus, independent claim 33 is also allowable.

With respect to new independent claim 32, Applicants respectfully submit that the Uchida reference fails to teach or suggest *Nb dispersed in the main phase and the grain boundary phase of the sintered body.* Paragraph 8 of the outstanding Office Action also confirms this fact. Accordingly, Applicants respectfully submit that new claim 32 is patentably distinguishable over the cited reference.

Further remarks regarding the asserted relationship between the claims and the cited reference is not necessary in view of their allowability. Applicants' silence as to the Examiner's comments is not indicative to being in acquiescence to the stated grounds of rejection.

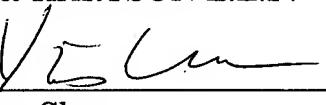
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CONCLUSION:

In view of the foregoing amendments and remarks, Applicants respectfully submit that this application is in condition for allowance and request early notice to that effect.

If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at the Washington, D.C. telephone number 202 637-3615 to discuss the steps necessary for placing the application in condition for allowance.

Respectfully submitted,
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